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IN THE NAME OF

SETH HARMAN AND SANDRO PASQUALI

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FOR

SYSTEM AND METHOD FOR PROVIDING A DYNAMIC CONTENT WINDOW WITHIN A WINDOWS-BASED CONTENT MANIFESTATION ENVIRONMENT PROVIDED IN A BROWSER

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Prepared By:

PILLSBURY WINTHROP LLP
725 South Figueroa Street, Suite 2800
Los Angeles, CA 90017-5406
Telephone: (213) 488-7100
Facsimile: (213) 629-1033

Express Mail No.: EL 724 026 908 US

TITLE OF THE INVENTION

SYSTEM AND METHOD FOR PROVIDING A DYNAMIC CONTENT WINDOW WITHIN A WINDOWS-BASED CONTENT MANIFESTATION ENVIRONMENT PROVIDED IN A BROWSER

RELATED APPLICATION DATA

This application is a continuation-in-part of U.S. patent application Ser. No. 09/252,076, filed Feb. 18, 1999, now U.S. Patent No. X,XXX,XXX.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to systems and methods that are used to distribute and manifest content, such as advertising content, received via the Internet and World Wide Web (WWW). More particularly, the present invention relates to the dynamic manifestation of a shopping list or a television program within a window object maintained within a WWW browser environment.

2. Discussion of the Related Art

The Internet and the World Wide Web (WWW) have significantly impacted the way people receive information, purchase goods and services, and generally communicate. The Internet and WWW have facilitated whole content delivery industries that provide up-to-the-minute delivery (and sale) of information such as news, weather, sports scores, horoscopes, stock and securities information, advertising, etc. Many companies have recognized the great "gold-

rush" nature of the Internet and have been quick to establish Web sites where people (a.k.a. "network surfers") can visit to purchase books online, to receive specialized content such as investment and other reports, and to subscribe to content delivery services such as "electronic" newspapers and magazines. Despite the widespread use and acceptance of the Internet and the WWW, many industry analysts and insiders insist that our society has only begun to realize the advantages of publicly accessible network technologies and predict that our lives will only be further impacted by increased uses of the "Net".

Many companies have been quick to adopt the Internet and WWW as fertile ground to sell goods and services to network users. For example, many companies place "banner advertisements" on Web pages to entice network users to purchase related goods and services. In many cases, such banner ads are simple rectangular screen objects (e.g., one that has dimensions of 468 picture elements (pixels) by 60 pixels as defined by the Internet Advertising Bureau (Canada) (IAB) banner ad standards) that contain text or graphics and, possibly, animated graphics that are loaded or pushed to a network user's Web browser for loading and static display thereby. Additionally, Java-based banner ads have been used to enhance advertising content. Once loaded, however, such advertising banners will appear on a network user's screen and, in particular, within a content manifestation environment maintained by a running WWW browser software package so long as the user remains on or at a particular Web site. And, since banner ads are loaded as screen objects within a Web site window, they remain static until either a new Web site is loaded or a browser reload/refresh operation occurs at the behest of the network user.

Banner ads often are associated with hypertext links that allow network users to surf to an advertiser's or sponsor's Web site to receive additional information about advertised goods and

services. For example, many online brokerage houses (e.g., www.etrade.com) sponsor banner ads such as at Yahoo.com's financial Web site to entice network users and, especially, those interested in stocks, bonds, and securities, to surf to a particular Web site to become online securities traders (and customers). Despite their static nature, banner ads have proven to be quite effective at routing traffic to advertiser's Web sites to promote the sale of goods and services online. In fact, banner ads as advertising and marketing tools have driven wide use and development of the Internet and WWW as a place for commerce. In fact, advertising via banner ads continues to be one of very few profitable ways to entice and engage in electronic commerce.

Despite their widespread use as tools to drive electronic commerce on the Internet and WWW, banner ads and other similar advertising and marketing mechanisms are not without their problems. For example, in addition to the fact that banner ads are statically displayed once loaded by a Web browser, banner ads and other similar marketing tools do not allow different and dynamic marketing content to be displayed within a browser window. That is, a banner ad usually contains mere graphic image(s) (e.g., one that may contain animated graphics) which is associated with a single hypertext link ("hyperlink"). Such a banner ad cannot dynamically display content such as marketing and advertising content that is to be received via a network connection after an initial container Web site page load.

Furthermore, in addition to the technical infirmities associated with modern banner ads, the same do not facilitate dynamic, rich advertising that network users have become used to in other media forums and which can deliver the most "bang for the buck" in terms of providing the highest possible sales return related to a particular marketing and promotion investment. For example, current banner ads do not come close to the richness of television or radio advertisements that allow full-motion video, audio, etc. Accordingly, although network

bandwidth capabilities do not currently allow the push of content like television ads, that same bandwidth is not being effectively deployed to facilitate richer, more effective network advertising.

Thus, there exists a need to provide new and improved systems and methods to facilitate dynamic display of advertising and marketing content. Such systems and methods must allow effective and efficient deployment of advertising banners and corresponding content streams without requiring Internet and WWW infrastructures and standards to change. And, to be viable, network users must be able to receive new and improved advertising and marketing content that facilitate greater sales in relation to spent advertising dollars.

Moreover, there exists a need to provide a system and method to facilitate display of a customer shopping list during online shopping. Conventional methods and systems do not readily provide the display of the selections made by the customer while the customer is shopping online. Rather, the customer typically is required to "click" away from the shopping Web page to go to a separate Web page to view the customer's shopping selections, and then return to the shopping Web page to continue shopping.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a screen image that depicts structural aspects of the present invention and, in particular, a window module configured to dynamically manifest advertising and marketing content therein within a windows-based content manifestation environment provided in accordance with a preferred embodiment of the present invention;

FIG. 2 is a block diagram of a computing environment in which a client computing system is coupled to a server system and which is configured to run a WWW browser client

which manifests a window module that can dynamically manifest advertising and marketing content in accordance with a preferred embodiment of the present invention;

FIG. 3A is a flowchart that illustrates a process for generating an advertising window module and for dynamically manifesting advertising and marketing content therein in accordance with a preferred embodiment of the present invention;

FIG. 3B is the conclusion of the flowchart started in FIG. 3A;

FIG. 4A illustrates a screen image displaying a floating shopping cart according to an embodiment of the present invention;

FIG. 4B illustrates a close-up view of the floating shopping cart in FIG. 4A according to an embodiment of the present invention;

FIG. 5A illustrates a screen image displaying a floating television window object according to an embodiment of the present invention; and

FIG. 5B illustrates a close-up view of the floating television window object in FIG. 5A according to an embodiment of the present invention.

DETAILED DESCRIPTION

The present invention is now discussed in detail with reference to the drawing figures that were briefly described above. Unless otherwise specified, like parts, systems, and processes are referred to with like reference numerals.

Glossary

The following terms may be used within the instant patent document to illustrate and define the novel features of the present invention. Accordingly, reference should be had to this Glossary for definitions of terms that are used to provide enabling disclosure related to the

present invention's systems and methods for facilitating a windows-based content manifestation environment within a WWW browser and a dedicated advertising, shopping list, and television program content window module therein.

The terms that are capitalized below bear the following meanings.

Content is any form of digital data stream that may be supplied or sent to a computing system such as a personal computer. In the context of the present invention, content includes advertising information, shopping list information, and television program information that may take the form of a data stream of video, audio, etc. Any media format that may be used to deliver active, dynamic content to a computer screen and other peripheral devices (e.g., sound systems, etc.) may be considered content in the context of the present invention.

The WWW is the World Wide Web and its associated protocols and related technologies which may be accessed via the Internet.

A WWW browser client is a software application that is operative to receive and process content to produce a corresponding output (e.g., to manifest text and images within a browser window displayed on a monitor device, etc.).

An Electronic Data Network is any type of network environment from which at least one coupled computer or computing system, including Wireless Application Protocol (WAP) enabled devices (such as personal digital assistants (PDAs), cellular telephones, etc.), is configured to receive content such as HTML and related WWW content and to process the same to produce an appropriate output. An exemplary electronic data network is the Internet along with the WWW.

A window object is a Module or a Layer.

A Layer is a WWW browser content display section produced within a content manifestation environment (CME) including, but not limited to, any object within an HTML

document that may be scaled, dragged, or otherwise operated upon such as an IMG object, a SPAN object, a DIV object, a form element, etc. and which may be associated with program logic such as within a script, etc. A layer has its own properties including, but not limited to, a name, etc. within an HTML rendition model such as those defined by DHTML standards. Additionally, a layer acts independently of other content within a particular HTML document.

A CME is a controllable WWW browser content display window provided by a WWW browser in a conventional computer system, or in a WAP-enabled device, etc. For example, a CME is viewed as a dynamic window in which WWW content is normally displayed.

A Module (also referred to herein as a Window Module) is a layer having (1) a control section, and (2) a related content display section which may be manifested within a CME. A module may be recursively referenced in that a particular module provided in accordance with the present invention may include other modules. In other words, the present invention makes it possible to have window objects within window objects. The control section of a module may contain a name associated with the module, one or more module sizing icons, etc.

A DMOD is a draggable module much like a draggable type window provided within an operating system environment.

A TMOD is a tiled module much like a tiled type window provided within an operating system environment.

A Fixed Screen Region or FSR is an area of a screen environment such as within a CME in which content may flow based on Module operations, Java applet control, etc.

A Fixed Layer or FL is a layer having the same behavior as a FSR.

A Content Manifestation Layer or CML is a pop-up type layer much like a pop-up dialog box that can manifest content based on operations occurring within a Module (e.g., hyper-link traversal and/or occurrence of another event, etc.).

Module Controls or MCs control objects such as objects associated with screen icons that react to events (e.g., mouse clicks, mouse-overs, double-clicks, etc.) and which control attributes of a module (e.g., minimization, maximization, closure, resizing, etc.). The icons associated with such control objects will appear in a control section of a module.

The terms "dynamic manifestation" and "dynamic display" refer to the rendition of content such as advertising and marketing content received via an electronic data network such as the Internet and WWW within a window module provided in accordance with the present invention. For example, dynamic manifestation includes the display of a full motion video stream received from an ad content source (URL) within a window module in accordance with the present invention.

The aforementioned and defined terms may be made plural in the text found below (e.g., "DMODs"). Such terms may only be referred to in documentation incorporated by reference herein.

A Windows Based Content Manifestation Environment (CME)

The present invention utilizes technology which has been described and disclosed in co-pending U.S. patent application Ser. No. 09/234,297, filed in the U.S. Patent and Trademark Office on Jan. 21, 1999, which is hereby incorporated by reference.

STRUCTURAL ASPECTS OF THE PRESENT INVENTION

Referring now to FIG. 1, depicted therein is a screen image that illustrates structural aspects of the present invention and, in particular, a window module configured to dynamically manifest advertising and marketing content, shopping list information, and television program information therein within a windows-based content manifestation environment provided in accordance with a preferred embodiment of the present invention.

In particular, screen image 100 depicts a WWW browser client CME 101 that has been instructed in accordance with the present invention to manifest a windows-based environment in which content may displayed or otherwise manifested in window modules provided in accordance with the present invention. Such window modules may be generated and manipulated in accordance with the structural and functional aspects defined in the above referenced co-pending U.S. patent application.

In CME 101, a series of window modules 102, 104, 106, 108, 110, and 112 in the form of DMODs have been provided to facilitate manifestation of content such as news, email, chat, search, etc. The creation of such window modules will be readily apparent after reviewing the above-referenced co-pending U.S. patent application.

In CME 101, a special window module 114 has been provided in the form of a DMOD to facilitate dynamic manifestation of advertising and marketing content, shopping list content, and television program content that may be received by a WWW browser client (running on a personal data processing system, for example) via a network connection, etc. Window module 114 has been defined to have a control section that includes a title (e.g., "SPONSORS") and a set of control icons. Such structural aspects along with their corresponding operational features

related to window module 114 are fully described in the above-referenced co-pending U.S. patent application.

The content that may be manifested within window module 114 may include any type of content including live video streams, audio feeds, etc. Such content is manifested, for example, in a manifestation area 116 of window module 114.

Unlike banner advertisements, window module 114 may be used to manifest advertising and marketing content, shopping list content, and television program content in a dynamic way and, possibly, from a variety of content sources each having an associated uniform resource locator (URL). Accordingly, so long as a network user remains at a particular Web site (e.g., one that provides for a windows-based content manifestation environment — WWW.WINDOWSWEBSITE.COM) and/or just a dynamic ad window in accordance with the present invention, a dynamic advertising content, shopping list, or television program window may be displayed to manifest content such as from a variety of advertisers and sponsors, broadcasters, providers, merchants, etc.

As the present invention now provides a dynamic Web-based advertising and shopping vehicle that is different from the use of conventional banner advertisements, a whole new way of generating advertising revenue, as well as online shopping, is realized. That is, in contrast to conventional banner advertisement revenue paradigms that call for cost per impression pricing, the present invention and its provision of a dynamic advertising content window now allow for the generation of advertising revenue according to paradigms used for television and other media forums. For example, advertisers who would normally pay for banner advertisement impressions may now place ads that are rich in content and that exist for periods of time much like television

commercials and the like. Accordingly, advertising and marketing firms may now derive advertising revenue for "air time" of particular dynamic content advertisements.

Referring now to FIG. 2, depicted therein is a is a block diagram of a computing environment in which a client computing system is coupled to a server system and which is configured to run a WWW browser client that manifests a window module that can dynamically manifest advertising and marketing content in accordance with a preferred embodiment of the present invention.

In environment 200, a client computing system such as a personal data processing system or computer 202 is coupled to a server system 210 via an electronic data network such as the Internet and WWW, an intranet or other network computing environment. The dashed line separating client data processing system 202 and server system 210 is intended to merely illustrate the transmission of data from a server type data processing system and the receipt of that data by a client type data processing system.

Server data processing system 210 is coupled directly or indirectly (e.g., via a network connection) to advertising and marketing content sources 212 through 214. Such sources may be computing platforms and networks that serve advertising content upon request for the same from a WWW browser client in accordance with the present invention. For example, an ad content source like or similar to ad content source 212 may serve a video stream that will appear as a full motion video and audio commercial (e.g., much like a television commercial) within an advertising content window provided within a WWW browser CME in accordance with the present invention.

Client data processing system 202 includes a data storage facility 204, a processor arrangement having one or more processing units, and input/output facilities to facilitate network

communications such as TCP/IP protocol based communications (e.g., a modem, a network interface card, etc.). Input/output facilities 208 also include content manifestation peripherals including, but not limited to, a monitor for visual display, a set of speakers for audible manifestation, a printer for hard-copy output, etc. The structural arrangement of the component parts of client data processing system 202 will be immediately understood by those skilled in the art of computer design.

Data storage facility 204 (e.g., local hard disk drives, etc.) store a network client and/or WWW browser client software package/application that may be executed within client data processing system. Such a network client/WWW browser client software package/application may be the INTERNET EXPLORER (TM), which is manufactured and marketed by MICROSOFT CORPORATION. Such a network client/WWW browser client software package/application will be instructed in accordance with a software system received from server system 210 to facilitate a windows-based content manifestation environment within a WWW browser type content manifestation environment window. Additionally, such a network client/WWW browser client software package/application will receive data related to at least one advertising and marketing content source from server data processing system 210 (e.g., at least one URL which points to ad content sources such as ad content sources 212 through 214). Alternatively, such data received from server system 210 may include ad content.

OPERATIONAL ASPECTS OF THE PRESENT INVENTION

Referring now to FIGS. 3A and 3B, depicted therein is a flowchart that illustrates a process for generating an advertising window module within a WWW browser and for

dynamically manifesting advertising and marketing content, shopping list content, or television program content therein in accordance with a preferred embodiment of the present invention.

In particular, processing and operations start at step S3-1 and immediately proceed to step S3-2. At step S3-2 a client data processing system loads and runs a WWW browser client software package/application or other network client.

Next, at step S3-3, a network connection is initiated by the client data processing system (e.g., a dial-up networking connection via a modem, etc.).

Next, at step S3-4, a network user causes the running WWW browser or other network client to access a URL or a windows based web site (e.g., URL - www.windows_website.com and one that points to server side systems).

Next, at step S3-5, a software system is downloaded from server side systems to the client data processing system. Such a software system facilitates a windows based CME within a WWW browser and is discussed in detail in co-pending U.S. patent application Ser. No. 09/234,297, filed Jan. 21, 1999, which has been incorporated herein by reference.

Next, at step S3-6, the downloaded software system causes the WWW browser client to manifest a windows-based web site in a browser CME.

Processing and operations proceed at the top of FIG. 3B to which reference is now made.

At step S3-7, at least one window module object (e.g., window module 114) is generated within a WWW browser client CME and is specified as an advertising, marketing, and sponsor type window module in which advertising content may be dynamically manifested in accordance with the present invention.

Next, at step S3-8, the ad/sponsor window module may dynamically manifest an ad content stream received from an ad content source. And, there may be subsequent server queries

on a continuous basis, for example, to facilitate the manifestation of different and multiple commercials from various sponsors while a windows-based Web site is viewable in the WWW browser CME.

Processing and operations end at step S3-9.

It should be noted that although a singular advertising content window has been shown and described relative to a WWW browser CME, the present invention is not so limited. To the contrary any number of ad window modules may be deployed to dynamically manifest advertising content.

Furthermore, although the present invention certainly contemplates generation of one or more advertising content window modules within a windows-based CME of a WWW browser client, the present invention is not so limited. In fact, the present invention also contemplates the use of the disclosed technologies on conventional type Web sites to offer any number of windows-like dynamic advertising content manifestation. Such technologies will now allow web site providers to offer richer content manifestation environments.

The present invention now provides a new way of generating online based advertising revenue. That is, in addition to simple banner ad impression revenue, advertisers and advertising entities may now charge for advertising content display much like the way television ads are charged. In particular, advertisers and advertising entities may now charge for timed "spots" such as thirty second ads during certain time periods (e.g., a thirty second spot during a peak network use period when most relevant consumers are visiting a particular Web site, etc.).

FIG. 4A illustrates a screen image displaying a floating shopping cart according to an embodiment of the present invention, and FIG. 4B illustrates a close-up view of the floating shopping cart in FIG. 4A according to an embodiment of the present invention. Within the CME

401 illustrated in FIG. 4A, there are also a number of window modules 402, 404, 406. The floating shopping cart 414 is also a window module (window object) (similar to the window module 114 discussed above) within the CME 401. The floating shopping cart 414 may be utilized with any number of the online merchants and Web sites available today who are offering products and/or services. The floating shopping cart 414 is adapted so that while a user adds/deletes items to his or her shopping list, or even "drags and drops" an icon on the CME 401 representing an item into the floating shopping cart 414, the floating shopping cart 414 displays the user's choices, preferably in real time. The floating shopping cart 414 allows the user to continually keep track of the products/services selected by the user in the user's shopping list. The floating shopping cart 414 preferably displays HTML content in its manifestation area 416, but, any suitable programming content may be utilized. The shopping list is preferably data (such as in the form of a computer-readable file) representative of the selections made by the user with respect to the products/services to be purchased. The user shopping list is preferably stored on a server system 210 (see Fig. 2), in a shopping list content source, such as a computer storage medium like a hard disk drive, optical disk, database, etc., that is capable of storing computer-readable files of the shopping list.

For example, the user may be shopping for DVDs and books, and the user finds a DVD that the user is interested in purchasing. The user clicks the "Add to Shopping Cart" button (or equivalent) on the Web page corresponding to the DVD the user is interested in, and the floating shopping cart 414 appears within the CME 401 of the Web browser, preferably listing the title 430 of the selection and its price 440 (see Fig. 4B). As illustrated in the example of FIG. 4B, the user has selected three DVDs and one book in the user's floating shopping cart 414. Preferably a "delete" button 420 is placed next to each item in the floating shopping cart 414 so as to allow

the user to remove any item from the floating shopping cart 414 at any time. Additionally, if the "drag and drop" concept is utilized, then, an icon in the floating shopping cart 414 may be "dragged and dropped" from the floating shopping cart 414 in order to remove it. Accordingly, as products/services are added or deleted from the user's shopping list, for example, by clicking "add" or "delete" buttons, or from "dragging and dropping" icons into or from the floating shopping cart 414, the floating shopping cart 414 dynamically updates its content to display the current status of the user's shopping list. Preferably, the floating shopping cart 414 includes other information, such as the subtotal of the products/services in the user's shopping list, the applicable tax, shipping costs, total cost, etc. Accordingly, as the products/services are added or deleted from the user's shopping list, corresponding information such as the total cost, taxes, subtotals, shipping costs, etc. are preferably dynamically updated as well reflecting the current status of the user's shopping list.

By utilizing the floating shopping cart 414 according to an embodiment of the present invention, the user/customer is able to observe and manipulate (i.e., add/delete) the items in the user's shopping list all while navigating from Web page to Web page, even when the user is browsing or shopping, in order to obtain the status of the user's shopping list. Moreover, the floating shopping cart 414 preferably includes a "reset" button 450 (or equivalent) so as to clear out the user's shopping list, and a "check out" button 460 (or equivalent) so that the user's shopping list in the floating shopping cart 414 may be finalized and the order confirmed. The floating shopping cart 414 is preferably any combination of being moveable, resizable, maximized, and minimized within the CME 401.

FIG. 5A illustrates a screen image displaying a floating television window object according to an embodiment of the present invention, and FIG. 5B illustrates a close-up view of

the floating television window object in FIG. 5A according to an embodiment of the present invention. As illustrated in FIG. 5A, the floating television 514, similar to the window module 114 discussed above, is a window module (window object) residing within the CME 501 of a Web browser. As illustrated in FIG. 5B, the manifestation area 516 of the floating television 514 preferably includes a channel selector 530 to allow a user to select different types of audio-visual programming (e.g., news, sports, weather, entertainment, music, Discovery channel, Nickelodeon, etc.); a control box 520 having operation buttons such as play, stop, rewind, and fast-forward, volume control, and a time scroll bar; and a video display box 540 to display full-motion video of a television program. Preferably, the accompanying audio feed is provided corresponding to the full-motion video by speakers of the host computer system. However, it is possible that for a particular television program, audio may not be available. The audio-visual program is preferably stored on a server system 210 (see Fig. 2), in an audio-visual content source.

The floating television 514 window object according to an embodiment of the present invention may be adapted to display the transmission of digital or analog television programming, telecasts, cable-casts, etc., over the Internet in substantially real time, or as a retransmission/rebroadcast. In addition to just television programs, movies, commercials, advertisements, etc., having audio-visual content may be displayed utilizing the floating television 514. The floating television 514 may occupy a part of the CME 501 so that the user may be performing other computing tasks, particularly on the Internet, while still being able to watch an audio-visual program at the same time on the same display monitor. The floating television 514 is preferably any combination of being moveable, resizable, maximized, and minimized within the CME 501.

While the description above refers to particular embodiments of the present invention, it will be understood that many modifications may be made without departing from the spirit thereof. The accompanying claims are intended to cover such modifications as would fall within the true scope and spirit of the present invention. The presently disclosed embodiments are therefore to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims, rather than the foregoing description, and all changes that come within the meaning and range of equivalency of the claims are therefore intended to be embraced therein.